

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-50 (cancelled)

51. (currently amended) A conservation tillage implement comprising:

- a) a cultivator frame;
- b) a plurality of individual coulter wheel assemblies;
- c) a mounting means corresponding to each individual coulter wheel assembly; and,
- d) four or more longitudinally spaced apart rows of laterally spaced apart individual coulter wheel assemblies, each coulter wheel assembly individually mounted to the frame using the mounting means, wherein a coulter wheel assembly in a given row is staggered with respect to the coulter wheel assemblies in a longitudinally adjacent row and laterally spaced apart from adjacent coulter wheel assemblies in order to reduce plugging of crop residue between the coulter wheels.

52. (previously presented) The conservation tillage implement according to claim 51, wherein each coulter wheel assembly is laterally adjustable.

53. (previously presented) The conservation tillage implement according to claim 51, wherein each coulter wheel assembly comprises a coulter wheel and a corresponding spring element.

54. (previously presented) The conservation tillage implement according to claim 80, wherein the spring element comprises a coil spring having upper and lower shank ends extending tangentially therefrom.

55. (Original) The conservation tillage implement according to claim 54, wherein the lower shank end is permitted to deflect upwardly about the horizontal spring axis in response to impact with an obstacle.

56. (Original) The conservation tillage implement according to claim 51, wherein the mounting means permits rotational movement of the coulter wheel assembly about a vertical axis.

57. (Original) The conservation tillage implement according to claim 56, wherein the mounting means comprises a vertically extending hollow strut having a pair of opposed horizontal slots therethrough.

58. (Original) The conservation tillage implement according to claim 57, wherein the coulter wheel assembly comprises a shank having a horizontal hole therethrough and wherein the shank is secured within the hollow strut by means of a horizontal pin extending through the slots and the hole, thereby permitting rotational movement of the shank within the hollow strut about the vertical axis.

59. (previously presented) The conservation tillage implement according to claim 51, wherein the implement further comprises removable individual field working tools.

Claims 60-70. (Cancelled)

71. (previously presented) The conservation tillage implement according to claim 51, wherein each coulter wheel assembly is able to deflect upwardly in response to impact with an obstacle.

72. (previously presented) The conservation tillage implement according to claim 51, wherein the frame comprises three or more longitudinally spaced apart transverse cross-members.

73. (cancelled)

74. (currently amended) The conservation tillage implement according to claim ~~73~~ 72, wherein the coulter wheel assemblies are mounted to the transverse cross-members.

75 (cancelled)

76. (currently amended) The conservation tillage implement according to claim ~~75~~ 51, wherein the implement further comprises removable individual field working tools and wherein the individual coulter wheel assemblies in a given row are staggered with respect to all coulter wheel assemblies and field working tools in longitudinally adjacent rows of the conservation tillage implement.

77. (currently amended) The conservation tillage implement according to claim ~~73~~ 72, wherein there are a plurality of transverse cross-members for a given row.

78. (previously presented) The conservation tillage implement according to claim 77, wherein the plurality of transverse cross-members are aligned along a common transverse axis.

79. (currently amended) The conservation tillage implement according to claim 51, wherein the implement is able to operate at shallow depths of less than 4-6" for seedbed preparation.

80. (previously presented) The conservation tillage implement according to claim 53, wherein the spring element has a horizontal spring axis about which the coulter wheel arcuately deflects in response to impact with an obstacle.

81. (new) The conservation tillage implement of claim 52, wherein a lateral spacing between adjacent coulter wheel assemblies is adjustable by a farmer according to soil, moisture or crop residue conditions by an amount sufficient to reduce plugging of crop residue between the coulter wheels.

82. (new) The conservation tillage implement of claim 71, wherein each coulter wheel assembly is able to deflect upwardly in response to impact with an obstacle by an amount sufficient to permit the implement to operate at speeds of 8 to 12 mph without damaging the implement upon impact.

83. (new) The conservation tillage implement according to claim 79, wherein the implement is able to operate at shallow depths of as little as 1" for seedbed preparation.